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Title OCCUPANT MANAGEMENT METHOD, SYSTEM, AND PROGRAM PRODUCT

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions and listings of the claims.

Listing of Claims:

- 1-22 (Cancelled).
- 23. (Currently Amended) A method of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the method comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant at an area of a floor associated with the occupant;
- (d) traversing the data structure to retrieve retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.
- 24. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the status is one of evacuation status and medical status.

- 25. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the method further comprises automatically detecting a type of the emergency event.
 - 26. (Cancelled).
 - (Cancelled).
- 28. (Currently Amended) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the method further comprises generating the hierarchical representation for the multi-floored building from an electronic building design plan or manual input.
 - 29. (Cancelled).
- 30. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the method further comprises dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building.
- 31. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 30, wherein the dynamic update is based on one from occupant's physical location and occupant's schedule within the multi-floored building.
- 32. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the method further comprises disassociating the occupant node from an area node of a floor of the multi-floored building when an occupant leaves the multi-floored building.
- 33. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the step of contacting each occupant further comprises:

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transmitting a list of possible statuses to the occupant; and receiving a selection of a status from the list of possible statuses from the occupant.

- 34. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the step of contacting each occupant further comprises a step of assigning an unknown status for the occupant if contacting the occupant fails.
 - 35. (Cancelled).
 - (Cancelled).
- 37. (Previously Presented) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 23, wherein the method further comprises providing the occupant with a directive on the basis of the determined status for the occupant.
 - 38. (Cancelled).
- 39. (Currently Amended) A system for managing a plurality of occupants of a multifloored building with each floor having a plurality of areas during an emergency event, the system comprising:

a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node for representing each floor of the multi-floored building; (ii) an area node for representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) an occupant node for representing each occupant in the multi-floored building and being relationally associated with one or more area nodes of a floor of the multi-floored building; (iv) on-ore one or more device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant at an area of a floor associated with the occupant;

a device for traversing the data structure to retrieve retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

a device for contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

- 40. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the status is one of evacuation status and medical status.
- 41. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the system further comprises a device for automatically detecting a type of the emergency event.
 - 42. (Cancelled).
 - 43. (Cancelled).
- 44. (Currently Amended) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the system further comprises a means for generating the hierarchical representation for the multi-floored building <u>from an</u> electronic building plan or manual input.
 - (Cancelled).
- 46. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the system further comprises a means for dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building.

- 47. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 46, wherein the dynamic update is based on one from occupant's physical location and occupant's schedule within the multi-floored building.
- 48. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the system further comprises a means for disassociating the occupant node from an area node of a floor of the multi-floored building when an occupant leaves the multi-floored building.
- 49. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the device for contacting each occupant further comprises: (i) transmitting a list of possible statuses to the occupant's device; and (ii) receiving a selection of a status from the list of possible statuses from the occupant's device.
- 50. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the device for contacting each occupant further comprises assigning an unknown status for the occupant if contacting the occupant's device fails.
 - (Cancelled).
 - (Cancelled).
- 53. (Previously Presented) The system for managing a plurality of occupants of a multi-floored building in accordance with Claim 39, wherein the device for contacting each occupant comprises providing the occupant with a directive on the basis of the determined status for the occupant.
 - 54. (Cancelled).
- (Currently Amended) A program storage device tangibly embodying a program
 of instructions executable by a machine to perform the steps of a method for managing manage a

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plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the method instructions comprising:

- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant at an area of a floor associated with the occupant;
- (d) traversing the data structure to retrieve retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.
- 56. (Previously Presented) The program storage device in accordance with Claim 55, wherein the status is one of evacuation status and medical status.
- 57. (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions further comprise[[s]] automatically detecting a type of the emergency event.
 - 58 (Cancelled).
 - 59 (Cancelled).
- (Currently Amended) The program storage device in accordance with Claim 55, 60 wherein the method instructions further comprise[[s]] generating the hierarchical representation for the multi-floored building from an electronic building plan or manual input.

(Cancelled).

- 62. (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions further comprises dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building.
- 63. (Previously Presented) The program storage device in accordance with Claim 62, wherein the dynamic update is based on one from occupant's physical location and occupant's schedule within the multi-floored building.
- 64. (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions further comprise[[s]] disassociating the occupant node from an area node of a floor of the multi-floored building when an occupant leaves the multi-floored building.
- (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions of contacting each occupant further comprise[[s]]:

transmitting a list of possible statuses to the occupant; and receiving a selection of a status from the list of possible statuses from the occupant.

- 66. (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions of contacting each occupant further comprise[[s]] a-step-of assigning an unknown status for the occupant if contacting the occupant fails.
 - 67. (Cancelled).
 - 68. (Cancelled).
- 69. (Currently Amended) The program storage device in accordance with Claim 55, wherein the method instructions further comprise[[s]] providing the occupant with a directive on the basis of the determined status for the occupant.
 - (Cancelled).

71. (New) A method of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the method comprising:

generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;

generating in the data structure an occupant node for each occupant in the multi-floored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;

generating in the data structure one or more device nodes for each occupant in the multifloored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

providing a first set of directions in a first area node for an exit point from a first area represented by the first area node to an entry point of a second area represented by a second area node:

providing a second set of directions in the second node for an exit point from the second area represented by the second area node to an entry point of a third area represented by a third area node; and

combining the first set directions and the second set of directions for a combined set of directions from the first area node to the third area node.

retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

72. (New) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 71, wherein the method further comprises:

selecting the first area node as a starting point;

selecting the third area node as a destination point; and

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generating directions from the first area node to the third area node using the combined set of directions.

73. (New) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 71, wherein the method further comprises:

generating the hierarchical representation for the multi-floored building from an electronic building design plan or manual input;

associating one or more area nodes with a first portion of the building plan; and displaying the first portion of the building plan upon selection of an area node associated with the first portion of the building plan.

74. (New) The method of managing a plurality of occupants of a multi-floored building in accordance with Claim 73, wherein the method further comprises:

displaying the first portion of the building plan in a zoomed in or highlighted display.

- 75. (New) A method of managing a plurality of occupants including visitors of a multi-floored building, with each floor having a plurality of areas, and each area having a plurality of sub-areas, during an emergency event, the method comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node, each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node, and each of the plurality of sub-areas of each area being represented by a sub-area node that is relationally associated to the area;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more sub-area nodes of a floor of the multi-floored building;
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to a subarea of a floor at which to contact the occupant;

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- (d) retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at a sub-area of a floor associated with that occupant.
- 76. (New) A method of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the method comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;
- (c) generating in the data structure a plurality of device nodes for each occupant in the multi-floored building and relationally associating the plurality of device nodes to the occupant node for that occupant, each of the plurality of device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;
- (d) retrieving device information for a plurality of devices for each occupant from the plurality of device nodes of the data structure associated with at least one area of at least one floor that is affected by an emergency event; and
- (e) iterating through the plurality of devices for each occupant to contact that occupant via a respective device from the plurality of devices associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.
- 77. (New) A method of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the method comprising:

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- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building:
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;
- (d) retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor;
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant;
- (f) determining the area of the floor at which each occupant is located based on the device via which the occupant is contacted or occupant's entry using the device;
- (g) receiving evacuation information from the contacted occupant relating to the determined area of the floor at which occupant is located; and
- (h) using received evacuation information relating to the determined area of the floor in contacting other occupants.
- 78. (New) A system for managing a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the system comprising:

a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node for representing each floor of the multi-floored building; (ii) an area node for representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) an occupant node for representing each occupant in the multi-floored building and being relationally associated with one or more area nodes of a floor of the multi-floored building; (iv) one or more device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the

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device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

a first area node providing a first set of directions for an exit point from a first area represented by the first area node to an entry point of a second area represented by a second area node:

a second node providing a second set of directions for an exit point from the second area represented by the second area node to an entry point of a third area represented by a third area node:

a means for combining the first set directions and the second set of directions for a combined set of directions from the first area node to the third area node:

a device for retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

a device for contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

- 79. (New) The system of managing a plurality of occupants of a multi-floored building in accordance with Claim 78, wherein the system further comprises:
 - a means for selecting the first area node as a starting point;
 - a means for selecting the third area node as a destination point; and
- a means generating directions from the first area node to the third area node using the combined set of directions.
- 80. (New) The system of managing a plurality of occupants of a multi-floored building in accordance with Claim 78, wherein the system further comprises:
- a means for generating the hierarchical representation for the multi-floored building form an electronic building design plan or manual input;
- a means for associating one or more area nodes with a first portion of the building plan; and
- a means for displaying the first portion of the building plan upon selection of an area node associated with the first portion of the building plan.

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of the building plan in a zoomed in or highlighted display.

81. (New) The system of managing a plurality of occupants of a multi-floored building in accordance with Claim 80, wherein the means for displaying displays the first portion

- 82. (New) A system of managing a plurality of occupants including visitors of a multi-floored building, with each floor having a plurality of areas, and each area having a plurality of sub-areas, during an emergency event, the system comprising:
- a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node representing a floor of the multi-floored building; (ii) an area node representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) a sub-area node representing each of the plurality of sub-areas of each area and being relationally associated to the area; (iv) an occupant node representing each occupant in the multi-floored building and being relationally associated with one or more sub-area nodes of a floor of the multi-floored building; and (v) one or more device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the device nodes including device information for a device correlated to a sub-area of a floor at which to contact the occupant;
- a device to retrieve device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and
- a device to contact each occupant via a device associated with the retrieved device information to determine the status of that occupant at a sub-area of a floor associated with that occupant.
- 83. (New) A system of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the system comprising:
- a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node for representing each floor of the multi-floored building; (ii) an area node for representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) an occupant node for representing each occupant in

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the multi-floored building and being relationally associated with one or more area nodes of a floor of the multi-floored building; and (iv) a plurality of device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

a device to retrieve device information for a plurality of devices for each occupant from the plurality of device nodes of the data structure associated with at least one area of at least one floor that is affected by an emergency event; and

a device to iterate through the plurality of devices for each occupant and to contact that occupant via a respective device from the plurality of devices associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

84 (New) A system of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the system comprising:

a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node for representing each floor of the multi-floored building; (ii) an area node for representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) an occupant node for representing each occupant in the multi-floored building and being relationally associated with one or more area nodes of a floor of the multi-floored building; (iv) one or more device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

a device to retrieve device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor;

a device to contact each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant;

a means to determine the area of the floor at which each occupant is located based on the device via which the occupant is contacted or occupant's entry using the device;

a means to receive evacuation information from the contacted occupant relating to the determined area of the floor at which occupant is located; and

a means to use received evacuation information relating to the determined area of the floor in contacting other occupants.

85. (New) A program storage device tangibly embodying a program of instructions executable by a machine to manage a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the instructions comprising:

generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;

generating in the data structure an occupant node for each occupant in the multi-floored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;

generating in the data structure one or more device nodes for each occupant in the multifloored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

providing a first set of directions in a first area node for an exit point from a first area represented by the first area node to an entry point of a second area represented by a second area node:

providing a second set of directions in the second node for an exit point from the second area represented by the second area node to an entry point of a third area represented by a third area node;

combining the first set directions and the second set of directions for a combined set of directions from the first area node to the third area node.

retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and Title: OCCUPANT MANAGEMENT METHOD, SYSTEM, AND PROGRAM PRODUCT

contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

86. (New) The program storage device in accordance with Claim 85, wherein the instructions further comprise:

selecting the first area node as a starting point;

selecting the third area node as a destination point; and

generating directions from the first area node to the third area node using the combined set of directions

87. (New) The program storage device in accordance with Claim 85, wherein the instructions further comprise:

generating the hierarchical representation for the multi-floored building from an electronic building plan or manual input;

associating one or more area nodes with a first portion of the building plan; and displaying the first portion of the building plan upon selection of an area node associated with the first portion of the building plan.

88. (New) The program storage device in accordance with Claim 87, wherein the instructions further comprise:

displaying the first portion of the building plan in a zoomed in or highlighted display.

- 89. (New) A program storage device tangibly embodying a program of instructions executable by a machine to manage a plurality of occupants of a multi-floored building, with each floor having a plurality of areas, and each area having a plurality of sub-areas, during an emergency event, the instructions comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node, each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node, and each of the plurality of sub-areas of each area being represented by a sub-area node that is relationally associated to the area:

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- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more sub-area nodes of a floor of the multi-floored building;
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to a subarea of a floor at which to contact the occupant;
- (d) retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at a sub-area of a floor associated with that occupant.
- 90. (New) A program storage device tangibly embodying a program of instructions executable by a machine to manage a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the instructions comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;
- (c) generating in the data structure a plurality of device nodes for each occupant in the multi-floored building and relationally associating the plurality of device nodes to the occupant node for that occupant, each of the plurality of device nodes including device information for a device correlated to an area of a floor at which to contact the occupant:
- (d) retrieving device information for a plurality of devices for each occupant from the plurality of device nodes of the data structure associated with at least one area of at least one floor that is affected by an emergency event; and
- (e) iterating through the plurality of devices for each occupant to contact that occupant via a respective device from the plurality of devices associated with the retrieved device

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information to determine the status of that occupant at an area of a floor associated with that occupant.

- 91. (New) A program storage device tangibly embodying a program of instructions executable by a machine to manage a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the instructions comprising:
- (a) generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;
- (b) generating in the data structure an occupant node for each occupant in the multifloored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;
- (c) generating in the data structure one or more device nodes for each occupant in the multi-floored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;
- (d) retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor;
- (e) contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant;
- (f) determining the area of the floor at which each occupant is located based on the device via which the occupant is contacted or occupant's entry using the device;
- (g) receiving evacuation information from the contacted occupant relating to the determined area of the floor at which occupant is located; and
- (h) using received evacuation information relating to the determined area of the floor in contacting other occupants.
- 92. (New) A method of managing a plurality of occupants including visitors of a multi-floored building with each floor having a plurality of areas during an emergency event, the method comprising:

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generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;

generating in the data structure an occupant node for each occupant in the multi-floored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;

generating in the data structure one or more device nodes for each occupant in the multifloored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building based on associated occupant's physical location or schedule within the multi-floored building;

retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

93. (New) A system for managing a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the system comprising:

a data structure having a hierarchical representation of the multi-floored building, the data structure including: (i) a floor node for representing each floor of the multi-floored building; (ii) an area node for representing each of the plurality of areas of each floor and being relationally associated to the floor node; (iii) an occupant node for representing each occupant in the multi-floored building and being relationally associated with one or more area nodes of a floor of the multi-floored building; (iv) one or more device nodes for each occupant in the multi-floored building being relationally associated to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant;

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a device for dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building based on associated occupant's physical location or schedule within the multi-floored building:

a device for retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

a device for contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.

94. (Currently amended) A program storage device tangibly embodying a program of instructions executable by a machine to manage a plurality of occupants of a multi-floored building with each floor having a plurality of areas during an emergency event, the instructions comprising:

generating a data structure having a hierarchical representation of the multi-floored building, with each floor being represented by a floor node and each of the plurality of areas of each floor being represented by an area node that is relationally associated to the floor node;

generating in the data structure an occupant node for each occupant in the multi-floored building and relationally associating the occupant node with one or more area nodes of a floor of the multi-floored building;

generating in the data structure one or more device nodes for each occupant in the multifloored building and relationally associating the device nodes to the occupant node for that occupant, each of the device nodes including device information for a device correlated to an area of a floor at which to contact the occupant:

dynamically updating the relational association of an occupant node with an area node of a floor of the multi-floored building based on associated occupant's physical location or schedule within the multi-floored building;

retrieving device information from one or more device nodes of the data structure in an emergency event that affects at least one area of at least one floor; and

contacting each occupant via a device associated with the retrieved device information to determine the status of that occupant at an area of a floor associated with that occupant.